

## **Introduction:**

The “Health Workforce Analysis Research: Recent Findings” matrix (Matrix) is a summary of important health care workforce research publications. This matrix was compiled through data extraction from research publications and other resources such as the California Postsecondary Education Commission (CPEC) and health licensing entities in California. The data extracted from these publications includes current supply, future demand, demand determination, race/ethnicity of current supply and practice patterns. Information regarding the number of students graduating per year from these health occupation training programs was collected from the California Postsecondary Education Commission.

## **Column Information:**

This Matrix contains 10 columns which provide data and other pertinent information:

- 1) **Discipline:** This column states the healthcare occupation being addressed.
- 2) **Current Supply:** States the current number of employees in a specific occupation as stated in the publication being researched. It also includes the year in which the current supply was estimated.
- 3) **Current Supply Ratio:** States the number of providers in a specific occupation, per 100,000 population.
- 4) **Future Demand:** Provides readers with the projected number of workers needed in a specific health care occupation. It also includes the year in which those workers would be needed.
- 5) **Demand Determination:** Explains how researchers of the publication projected future demand.
- 6) **Race/Ethnicity of Current Supply:** States the race/ethnicity of current health care workers for specific health care occupations.
- 7) **Practice Patterns:** Explains what settings health care workers actually practice in.
- 8) **Comments:** This section of the Matrix states important facts and pertinent information relating to specific health care occupations.
- 9) **# Of Programs in CA:** States the number of training programs in California for each health occupation.
- 10) **# Of Graduates per Year:** Identifies the number of students graduating from health occupation training programs in a specific year as stated by the Postsecondary Education Commission.

### **Disciplines Examined:**

There were a total of 28 disciplines examined in this Matrix: Podiatric Medicine, Osteopathic Medicine, Primary Care Physicians, Physician Assistants, Certified Nurse Midwives, Pharmacist, RN, LVN, Nurse Practitioners, Dentists, Dental Hygienists, Dental Assistants, Mental Health, Public Health, Optometry, Respiratory Care, Radiologic Technicians, Medical Assistants, Pharmacy Technicians, Home Health Aides, Nursing Assistants, EMT/Paramedic, Mental Health Counselor, Clinical Lab Scientist, Health Information Technicians, Substance Abuse/Behavioral Disorder Counselors, Mental Health/Substance Abuse Social Worker and Medical/Public Health Social Worker.

### **Lack of Data:**

This research matrix has exposed a huge lack of data on health workforce personnel. In the publications examined, there is some current supply information available; however, future demand data is almost non-existent for most of these occupations except for the allied health fields. Future demand data for Podiatrists, Osteopathic Medicine, Primary Care Physicians, Physician Assistants, Nurse Practitioners, Dentists, Dental Hygienists, and Optometrist is nonexistent in the articles reviewed. These are key occupations relating to primary care and should be addressed to find out how many workers will be needed in the future for these health occupations.

There is also a lack of practice pattern information, only 7 of the 28 occupations reviewed had practice pattern data, and of those 7, 1 had incomplete data. This incomplete data only showed where 71% of LVN's worked and didn't state where the other 29% worked. These are major issues that should be addressed to have a full view of where health care professionals practice.

Lastly, there is a huge lack in current data. Most of the sources examined in this matrix did not have anything recent. In order to find recent data on supply, numerous health licensing boards were contacted to gather this information.

### **Ease of Access:**

Data on healthcare workforce current supply, future demand, practice patterns and race/ethnicity is not easily accessible on one website. In order to find this information, one needs to look at multiple sources. This is a very challenging task considering the number of publications that exist, however, not all of these publications contain the necessary data.

### **Recommendations:**

There needs to be a central source or warehouse of health workforce data with some uniform minimum data standards to examine trends in California's health workforce. Also, there needs to be support for the full implementation of the Clearinghouse, which could then identify the actives and inactive supply of certified or licensed health providers in California and those who

have moved out of state. This data should be collected once a year or at least once every 2 years in order to keep it current. The data could then be used to inform public and private policy and program investments needed to improve health workforce supply.

**Questions for the Council:**

- 1) Are there other known California studies that have the data (all or some) elements included in this matrix, that have been completed in the last 3 to 5 years?